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10/808,890	03/25/2004	Yasutaka Kanayama	FUJ 20.916	7465
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575 MADISON AVENUE			SINGH, HIRDEPAL	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/808,890	KANAYAMA ET AL.
Office Action Summary	Examiner	Art Unit
	HIRDEPAL SINGH	2611
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the o	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING Description of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutor. Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  .136(a). In no event, however, may a reply be tired will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 15 F      This action is <b>FINAL</b> . 2b) ☑ This 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pro	
Disposition of Claims		
4)  Claim(s) 1-11 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-11 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	awn from consideration.	
<ul> <li>9) The specification is objected to by the Examin</li> <li>10) The drawing(s) filed on is/are: a) accompliant may not request that any objection to the Replacement drawing sheet(s) including the correct of the oath or declaration is objected to by the Examination.</li> </ul>	cepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat ority documents have been receive au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate

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### **DETAILED ACTION**

This action is in response to the amendment filed on February 15, 2008. Claims
 1-11 are pending and have been considered below.

## Response to Arguments

2. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Dunne et al. (US 2003/0152152).

#### Regarding claims 5 and 7:

Dunne et al discloses a data transmission system communicating between a first terminal transmitting second data formed by a second encoding system, and a second terminal for receiving information transmitted from the first terminal (120,122, 124 in figure 5) comprising;

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a first data terminal for inputting said second data and outputting first data encoded with a first encoding system (paragraphs 0008-0009) in a first mode and third data multiplexing said second data and said first data in a second mode (paragraph 0031); and

a second data terminal for inputting said first or third data (paragraphs 0008-0009) output and outputting to the second terminal, in the first mode, fifth data formed by encoding said first data input with a second encoding system (paragraph 0011) and also outputting, in the second mode, said second data isolated from said third data, wherein when said second data terminal is in said first mode and said third data is input, a part of said third data where said second data is multiplexed (70 in figure 1) is replaced with the particular data and said particular data is outputted through the encoding thereof with said second encoding system.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne et al. (US 2003/0152152) in view of Sebire et al. (US2004/0120302).

# Regarding claim 1:

Dunne et al discloses a data processing method for inputting data, the input data including one of a first data and a third data (paragraph 0008), the first data formed by encoding a signal with a first encoding system, and the third data formed by multiplexing second data formed by encoding the signal with a second encoding system and said first data (abstract; paragraphs 0008-0009 " first data is formed by first enhancement signal and third data is formed based on the third analyzer signal"; see figure 1), the data processing method outputting fourth data, the data processing method comprising the steps of:

providing a first mode (15 in figure 1) for inputting the first data, encoding the input data with the second encoding system and outputting the encoded input data as the fourth data (paragraph 0011, especially last 14 lines);

providing a second mode (paragraphs 0011 and 0026) for inputting the third data, isolating the second data and outputting the second data as the fourth data (paragraph 0030).

Dunne et al discloses all of the subject matter as described above and further discloses replacing a part of the third data where the second data is multiplexed with a particular data (paragraphs 0083-0086; and clearly stated in claim 6) encoding the input data including the replaced part with the second encoding system and outputting the encoded data (paragraphs 0021, 0024, 0030 and 0032) as the fourth data, except for specifically teaching that the method providing a third mode for inputting the third data.

However, Sebire et al in the same field of endeavor discloses a system and method where a method providing a third mode (abstract; paragraph 0041) for inputting the third data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to input third data formed by multiplexing second data and first data and encoding the decoded data and outputting the data in order to get the quality of data signal with minimal degradation as the compressed signal is enhanced.

## Regarding claim 2:

Dunne et al discloses all of the subject matter as described above and further discloses the steps of:

determining if the input data is the first data or the third data (paragraphs 0008 and 0028); and

determining whether to process the input data in the second mode or the third mode when the input data is the third data (paragraphs 0029 and 0031-0032).

Dunne et al discloses all of the subject matter as described above except for specifically teaching that the method includes a third mode.

However, Sebire et al in the same field of endeavor discloses a system and method where a method providing a third mode (abstract; paragraph 0041) for inputting the third data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to input third data formed by multiplexing second data and first data

and encoding the decoded data and outputting the data in order to get the quality of data signal with minimal degradation as the compressed signal is enhanced.

## Regarding claim 3:

Dunne et al discloses all of the subject matter as described above and further discloses that the first encoding system includes PCM (paragraphs 0005 and 0021) and the signal is an analog signal.

7. Claims 4, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne et al. (US 2003/0152152) in view of Kapanen et al. (US 6,850,883).

# Regarding claim 4:

Dunne et al discloses a data processing method for inputting data, the input data including one of a first data and a third data (paragraph 0008), the first data formed by encoding a signal with a first encoding system (abstract; paragraphs 0008-0009 " first data is formed by first enhancement signal and third data is formed based on the third analyzer signal"; see figure 1), and the third data formed by multiplexing second data formed by encoding the signal with a second encoding system and said first data, the data processing method outputting fourth data, the data processing method comprising the steps of:

detecting if the input data is the first data or the third data (paragraphs 0008 and 0028); and

determining whether to transition from a first operation mode to a second operation mode (paragraph 0031) for coding the input data, wherein when an operation mode is to be switched to said first mode or said second mode, a signal for

resetting (paragraph 0029 "enabling and disabling the processors") a data processor (48, 50 and 80 in figure 1) for decoding the data output with said second encoding system (30 and 60 in figure 1) is added, before such switching operation, to said fourth data and is then outputted.

Dunne et al discloses all of the subject matter as described above including the preamble portion which doesn't have same patentable weight as positive limitations in the body of the claim, except for specifically teaching that a signal for resetting data processor for decoding data output.

However, Kapanen in the same field of endeavor discloses a decoding method speech encoding processing system where a signal for resetting data processor for decoding data output (abstract; column 6, lines 64-67; column 7, lines 1-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement the teaching of Kapanen to reset the data processor for decoding data with a decoding system before switching to another mode in the Dunne system to make the switching between tandem and tandem free operation accordingly as required with resetting and synchronizing quantizing to advantageously use tandem free operation system by providing predictive and generally non stateless encoders.

# Regarding claims 6 and 8:

Dunne et al discloses a data transmission system communicating between a first terminal transmitting second data formed by a second encoding system, and a second terminal (120,122, 124 in figure 5) for receiving information transmitted from the first terminal comprising;

a first data terminal for inputting said second data and outputting first data encoded with a first encoding system in a first mode (paragraphs 0008-0009), and also outputting third data multiplexing said second data and said first data in a second mode (paragraph 0031);

a second data terminal for inputting said first or third data (paragraphs 0008-0009), and outputting to said second terminal, in a first mode, fourth data formed by encoding said first data with a second encoding system (paragraphs 0008-0009) and also outputting said second data isolated from said third data in a second mode, wherein when an operation mode is to be switched to said first mode or said second mode (17 and 18 in figure 1), the data for resetting a data processor to decode the data output with said second encoding system is added to said fourth data and then output before said mode switching operation (70 in figure 1).

Dunne et al discloses all of the subject matter as described above including the preamble portion which doesn't have same patentable weight as positive limitations in the body of the claim, except for specifically teaching that a signal for resetting data processor for decoding data output.

However, Kapanen in the same field of endeavor discloses a decoding method speech encoding processing system where a signal for resetting data processor for decoding data output (abstract; column 6, lines 64-67; column 7, lines 1-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement the teaching of Kapanen to reset the data processor for decoding data with a decoding system before switching to another mode in the Dunne

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system to make the switching between tandem and tandem free operation accordingly as required with resetting and synchronizing quantizing to advantageously use tandem

free operation system by providing predictive and generally non stateless encoders.

8. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne et al. (US 2003/0152152) in view of Kapanen et al. (US 6,850,883) as applied to claim 8 above, and further in view of Sebire et al. (US2004/0120302).

## Regarding claim 9:

Dunne et al discloses all of the subject matter as described above except for specifically teaching that the input data determining section determines if third data is inputted by detecting the synchronization bit of said multiplexed data.

However, Sebire et al in the same field of endeavor discloses a system and method where it discloses use of the synchronization bit of said multiplexed data (paragraph 0035).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to input third data formed by multiplexing second data and first data and encoding the decoded data and outputting the data in order to get the quality of data signal with minimal degradation as the compressed signal is enhanced.

# Regarding claim 10:

Dunne et al discloses all of the subject matter as described above and further discloses that input data determining section determines that said third data is inputted

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by detecting the signal to be transmitted before said third data is transmitted (paragraphs 0008-0009).

## Regarding claim 11:

Dunne et al discloses all of the subject matter as described above and further discloses that the input starting position (paragraphs 0072 and 0089) of said third data determined as input is obtained from the signal to be transmitted before said third data is transmitted.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIRDEPAL SINGH whose telephone number is (571)270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off)8:00AM-5:00PMEST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S./
Examiner, Art Unit 2611
May 27, 2008
/Shuwang Liu/
Supervisory Patent Examiner, Art Unit 2611